

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

TRANSLATION
PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **See Form PCT/ISA/210 (sheet 2)**

Applicant's or agent's file reference

03-B-221 WO

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/EP2004/013828

International filing date (day/month/year)

06.12.2004

Priority date (day/month/year)

23.01.2004

International Patent Classification (IPC) or both national classification and IPC

F16H48/00, B60K17/16

Applicant

BEHR GMBH & CO. KG

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	7	YES
	Claims	1-6, 8, 9	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO
2. Citations and explanations:			
<p>1) The following documents (D) cited in the search report are referred to in this report; the same numbering will be used throughout the procedure:</p> <p style="margin-left: 40px;">D1: DD 286 857 A5</p> <p style="margin-left: 40px;">D2: WO 02/057699 A</p> <p style="margin-left: 40px;">D3: US-A-5,165,468</p>			
<p>2) PCT Article 33(2)</p> <p>The present application fails to comply with the requirements of PCT Article 33(1) since the subject matter of claims 1-6, claim 8 and claim 9 is not novel within the meaning of PCT Article 33(2)).</p>			
<p>2.1) Claim 1</p> <p>Document D1 discloses (page 2, figure 2; the references in parentheses apply to this document):</p> <p>A heat exchanger having a plate-type design, wherein two adjacent heat exchanger plates (A1 +C1, B1 +C2) define a space (9) between them through which the heat exchange medium or a second medium that is to be cooled or heated flows, and,</p>			

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>at one end of the said heat exchanger, a base plate (15, 16) is provided, which lies at least substantially flat against the adjacent outermost heat exchanger plate (A1, A3) of the heat exchanger, the said base plate (15, 16) being provided with a recess the contours of which follow that of the heat exchanger plate (A1, A3).</p> <p>Claim 1 therefore lacks novelty.</p> <p>The technical features of claim 1 are also known from documents D2 and D3. Hence, the subject matter of claim 1 also lacks novelty over these documents.</p> <p>2.2) Claims 2-6 and 8, 9</p> <p>A heat exchanger with the features of the following claims is also known from the prior art:</p> <ul style="list-style-type: none">• (Claim 2) (D1, figure 2);• (Claim 3) (D1, figure 2);• (Claim 4) (D2, figures 2 and 11);• (Claim 5) (D2, figures 2 and 11);• (Claim 6) (D2, figures 2 and 11);• (Claim 8) (D1, figures 2 and 3);• (Claim 9) (D2, page 2, lines 20-26); <p>Therefore the subject-matter of claims 2-6 and 8, 9 also lacks novelty.</p>

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3)	<p>PCT Article 33(3)</p> <p>Dependent claim 7 does not contain any features which meet the requirements of the PCT with regard to inventive step, since producing the contour in the base plate by embossing (or casting or machining) is only one of several obvious possibilities from which a person skilled in the art would choose according to the circumstances, without this involving an inventive step, in order to solve the problem posed. Therefore, the subject matter of claim 7 does not involve an inventive step.</p>
4)	<p>PCT Article 33(4)</p> <p>Claims 1-9 are considered to be industrially applicable within the meaning of PCT Article 33(4).</p>

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

- 5) Contrary to PCT Rule 5.1(a)(ii), the description does not cite documents D1, D2 and D3, or indicate the relevant prior art disclosed therein.